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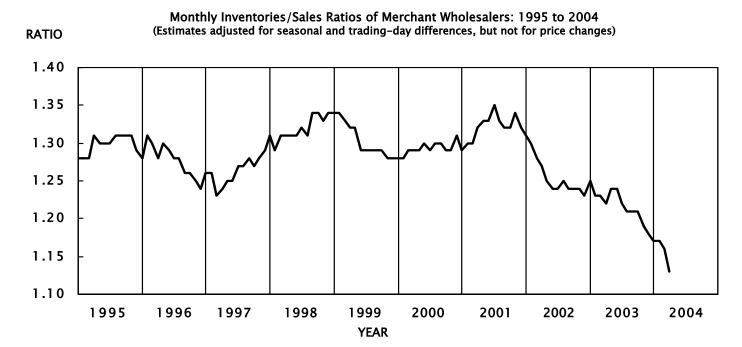
## MONTHLY WHOLESALE TRADE: SALES AND INVENTORIES MARCH 2004

**Sales.** March 2004 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences but not for price changes, were \$266.2 billion, up 2.7 percent (+/-0.7%) from the revised February level, and were up 12.0 percent (+/-1.0%) from the March 2003 level. The February preliminary estimate was revised upward \$2.1 billion or 0.8 percent. March sales of durable goods increased 3.9 percent (+/-1.0%) from last month, and were up 16.9 percent (+/-1.2%) from a year ago. Compared to last month, sales of metals and minerals, except petroleum increased 14.4 percent and sales of lumber and other construction materials were up 6.0 percent. March sales of nondurable goods increased 1.7 percent (+/-0.8%) from last month, and were up 7.6 percent (+/-1.7%) from last year. Sales of drugs and druggists' sundries increased 2.7 percent from last month and sales of groceries and related products were up 2.6 percent.

**Inventories.** Total inventories of merchant wholesalers, after adjustment for seasonal variations but not for price changes, were \$301.6 billion at the end of March, up 0.6 percent (+/-0.5%) from last month, and increased 3.8 percent (+/-1.5%) from a year ago. The February preliminary estimate was revised upward \$0.1 billion. End-of-month inventories of durable goods increased 0.9 percent (+/-0.5%) from February, and were up 3.9 percent (+/-0.8%) from last year. Inventories of metals and minerals, except petroleum increased 5.0 percent from last month and inventories of electrical goods, increased 1.7 percent. End-of-month inventories of nondurable goods increased 0.2 percent (+/-0.7%) from February, and were up 3.7 percent (+/-3.1%) from last year. Inventories of petroleum and petroleum products decreased 3.3 percent from last month and inventories of beer, wine, and distilled alcoholic beverages were down 1.7 percent.

Inventories/Sales Ratio. The March inventories/sales ratio for merchant wholesalers, based on seasonally adjusted data, was 1.13. The March 2003 ratio was 1.22.

Data in this report are based on a sample and, therefore, are subject to sampling and nonsampling error. A discussion of the reliability of the estimates and general survey methodology appears in BW/03-A Current Business Reports.



Monthly Wholesale Trade for April is scheduled to be released June 9, 2004 at 10:00 a.m.

Address inquiries concerning this report to Service Sector Statistics Division, U.S. Census Bureau, Washington, DC 20233, or call Nancy Piesto, (301) 763-2747.

This report is available on day of issue through the Department of Commerce's STAT-USA website; for information, call (202) 482-1986. The data are also available on the internet – http://www.census.gov/whl.

Table 1. Estimated Monthly Sales, Inventories, and Inventories/Sales Ratios of Merchant Wholesalers

[Total sales and inventory estimates are shown in millions of dollars. Estimates are based on data from the Monthly Wholesale Trade Survey, Annual Wholesale Trade Survey, and administrative records. Except for NAICS code 4225, estimates have been adjusted using results of the most recent economic census.]

recent et	Sales							Inventories							Inventories/Sales			
		Monthly Percent					hange		Pe	rcent ch	nange	Ratios						
NAICS1	Kind of	Mar.	Feb.	Mar.	Mar./	Feb./	Mar. 04/	Mar.	Feb.	Mar.	Mar./	Feb./	Mar. 04/	Mar.	Feb.	Mar.		
code	Business	2004	2004	2003	Feb.	Jan.	Mar. 03	2004	2004	2003	Feb.	Jan.	Mar. 03	2004	2004	2003		
		(p)	(r)	(r)				(p)	(r)	(r)				(p)	(r)	(r)		
Adjusted <sup>2</sup>																		
42	U.S. Total	266,213	259,109	237,727	2.7	2.1	12.0	301,583	299,712	290,483	0.6	1.2	3.8	1.13	1.16	1.22		
421	Durable	129,881	125,062	111,079	3.9	3.0	16.9	181,641	180,047	174,819	0.9	1.2	3.9	1.40	1.44	1.57		
4211	Automotive	19,756	19,495	18,311	1.3	5.8	7.9	27,012	26,671	25,302	1.3	1.6	6.8	1.37	1.37	1.38		
4212	Furniture	3,981	3,929	3,647	1.3	-0.1	9.2	5,979	5,935	5,525	0.7	-1.4	8.2	1.50	1.51	1.51		
4213	Lumber	9,281	8,754	6,633	6.0	5.2	39.9	8,902	8,848	7,486	0.6	3.5	18.9	0.96	1.01	1.13		
4214	Prof. equip.	22,573	22,376	20,989	0.9	-0.2	7.5	24,254			-0.7	0.7	0.7	1.07	1.09	1.15		
42143	Comp. equip.	10,382	10,169	9,053	2.1	-1.0	14.7	7,353	7,254	7,414	1.4	0.4	-0.8	0.71	0.71	0.82		
4215	Metals	10,454	9,142	7,192	14.4	5.0	45.4	16,005			5.0	4.3	18.4	1.53	1.67	1.88		
4216	Electrical	19,502	19,002	16,882	2.6	2.5	15.5	22,862	· '		1.7	3.1	1.9	1.17	1.18	1.33		
4217	Hardware	5,924	5,698	5,443	4.0	0.9	8.8	10,345	10,319	10,635	0.3	0.1	-2.7	1.75	1.81	1.95		
4218	Machinery	22,230	21,256	18,381	4.6	4.4	20.9	44,628			-0.7	0.5	-2.7	2.01	2.11	2.49		
4219	Misc. Durable	16,180		13,601	5.0	2.2	19.0	21,654		19,996	2.2	-1.2	8.3	1.34	1.37	1.47		
422	Nondurable	136,332	134,047	126,648	1.7	1.4	7.6	-	119,665	-	0.2	1.4	3.7	0.88	0.89	0.91		
4221	Paper	6,585	6,513	6,490	1.1	2.2	1.5	6,589	6,533	6,324	0.9	0.3	4.2	1.00	1.00	0.97		
4222	Drugs	23,457	22,836	20,844	2.7	1.6	12.5	30,899	30,698	30,913	0.7	3.9	0.0	1.32	1.34	1.48		
4223	Apparel	7,350	7,430	7,068	-1.1	3.3	4.0	12,168		12,503	1.1	1.4	-2.7	1.66	1.62	1.77		
4224	Groceries	36,032	35,133	34,418	2.6	0.6	4.7	22,379	22,140	22,090	1.1	0.9	1.3	0.62	0.63	0.64		
4225	Farm products	12,077	11,920	9,461	1.3	1.3	27.7	13,639	13,274	9,484	2.7	5.7	43.8	1.13	1.11	1.00		
4226	Chemicals	5,549	5,449	5,298	1.8	-1.2	4.7	5,823	5,870	6,000	-0.8	0.7	-3.0	1.05	1.08	1.13		
4227	Petroleum	22,735	22,393	21,728	1.5	3.1	4.6	4,766	4,927	4,455	-3.3	-1.9	7.0	0.21	0.22	0.21		
4228 4229	Alcohol Misc. Nondur.	7,030 15,517	7,161 15,212	6,975 14,366	-1.8 2.0	-2.7 1.9	0.8 8.0	7,411 16,268	7,537 16,651	7,504 16,391	-1.7 -2.3	-1.2 -2.9	-1.2 -0.8	1.05 1.05	1.05 1.09	1.08 1.14		
	•	13,317	13,212	14,300	2.0	1.9	6.0	10,208	10,031	10,391	-2.5	-2.9	-0.8					
Not Ad	<u>ijustea</u> I													Sales to dat		2003		
42	U.S. Total	289.493	240,408	242.813	20.4	0.6	19.2	304.196	302,535	292.191	0.5	0.7	4.1	768,	_	87,451		
421	Durable	•	114,092	•	25.1	3.1	24.7		180,740		1.0	2.2	4.1	367,		17,385		
<b>421</b> 4211	Automotive	21,929	17,955	19,098	22.1	9.2	14.8	27,795	27,578	25,985	0.8	4.2	7.0	-	324	51,781		
4211	Furniture	4,244	3,575	3,680	18.7	-0.1	15.3	5,853	5,840	5,398	0.8	-1.3	8.4		396	10,335		
4212	Lumber	10,023	7,590	6,606	32.1	4.4	51.7	9,285	8,954	7,785	3.7	5.2	19.3		885	18,471		
4214	Prof. equip.	24,943	20,161	21,850	23.7	-1.6	14.2	23,866	24,381	23,652	-2.1	0.7	0.9		603	59,929		
42143	Comp. equip.	11,534	9,030	9,497	27.7	-4.2	21.4	7,191	7,094	7,214	1.4	-0.8	-0.3		992	26,028		
4215	Metals	11,395	8,804	7,271	29.4	5.4	56.7	16,149	15,233	13,583	6.0	4.3	18.9		554	20,995		
4216	Electrical	21,316	17,558	17,388	21.4	2.5	22.6	22,428	22,233	22,004	0.9	2.7	1.9		996	48,528		
4217	Hardware	6,374	5,140	5,459	24.0	-1.6	16.8	10,490	10,360	10,763	1.3	2.1	-2.5	16,	739	15,485		
4218	Machinery	24,653	19,024	18,896	29.6	3.7	30.5	45,431	44,975	46,578	1.0	2.9	-2.5	62,	020	52,511		
4219	Misc. Durable	17,847	14,285	14,213	24.9	3.2	25.6	21,308	21,186	19,656	0.6	-2.0	8.4	45,	971	39,350		
422	Nondurable	146,769	126,316	128,352	16.2	-1.5	14.3	121,591	121,795	116,787	-0.2	-1.5	4.1	401,	320 3	70,066		
4221	Paper	7,151	6,051	6,535	18.2	-1.2	9.4	6,569	6,474	6,292	1.5	-0.9	4.4	19,	324	18,928		
4222	Drugs	25,521	21,169	20,844	20.6	-4.9	22.4	31,332	30,238	31,315	3.6	-1.8	0.1	68,	961	60,748		
4223	Apparel	8,578	7,601	7,676	12.9	16.7	11.8	11,657	11,854	11,953	-1.7	-2.1	-2.5	22,	693	21,772		
4224	Groceries	37,978	32,041	35,072	18.5	-3.1	8.3	22,357	21,830	22,024	2.4	-1.1	1.5	103,	081	99,100		
4225	Farm products	13,055	11,622	9,376	12.3	-9.8	39.2	14,989	15,584	10,376	-3.8	-0.1	44.5		556	30,766		
4226	Chemicals	6,060	5,160	5,415	17.4	-5.8	11.9	5,829	5,882	6,012	-0.9	1.9	-3.0		700	15,552		
4227	Petroleum	24,145	21,945	21,641	10.0	-0.1	11.6	4,714	5,050	4,419	-6.7	-3.8	6.7		056	62,197		
4228	Alcohol	7,135	5,987	6,536	19.2	4.7	9.2	7,307			0.6	-0.8	-1.2		841	17,663		
4229	Misc. Nondur.	17,146	14,740	15,257	16.3	3.6	12.4	16,837	17,617	16,997	-4.4	-3.0	-0.9	46,	108	43,340		

<sup>&</sup>lt;sup>p</sup> Preliminary estimate. <sup>r</sup> Revised.

Note: Estimates have not been adjusted for price changes. Table 2 provides estimated measures of sampling variability. Additional information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions may be found at <a href="http://www.census.gov/svsd/www/mwtsreliability.html">http://www.census.gov/svsd/www/mwtsreliability.html</a>.

<sup>&</sup>lt;sup>1</sup> For a full description of the NAICS codes used in this table, see <a href="http://www.census.gov/svsd/www/wnaicsdef.html">http://www.census.gov/svsd/www/wnaicsdef.html</a>.

<sup>&</sup>lt;sup>2</sup> Estimates are adjusted for seasonal variations and, in the case of sales, also for trading-day differences. See Table 3 for the seasonal adjustment factors used. Cumulative seasonally adjusted sales estimates are not tabulated.

Table 2. Coefficients of Variation and Standard Errors for Sales and Inventories Estimates

[Estimates are shown as percents. Estimates are based on data from the Monthly Wholesale Trade Survey and administrative records.]												
		M edian	coefficie for lev	ents of va vel (%)	ariation	M edian	standard	l errors fo	or trend	Coefficients of variation for level (%)		Standard errors for trend
NAICS code			Preliminary estimates		Final estimates		Ratio of two consecutive months		Year-to-year estimates		ive sales nates	Current year cumulative
		Sales	Inv.	Sales	Inv.	Sales	Inv.	Sales	Inv.	Current year	Previous year	to previous year cumulative
42	U.S. Total	1.1	1.6	1.1	1.6	0.4	0.3	0.6	0.9	1.1	1.1	0.7
421	Durable	1.2	1.6	1.2	1.6	0.6	0.3	0.7	0.5	1.2	1.0	0.8
4211	Automotive	3.5	4.2	3.5	4.3	1.2	0.7	1.1	1.4	3.8	3.4	1.0
4212	Furniture	6.7	8.0	6.5	8.0	1.9	0.7	2.3	2.7	7.9	6.3	1.9
4213	Lumber	5.0	6.2	5.0	5.9	1.2	0.8	2.5	1.8	5.8	4.4	3.4
4214	Prof. equip.	5.1	6.8	5.1	6.8	1.3	0.7	2.0	2.0	4.3	4.8	1.9
42143	Comp. equip.	8.0	8.8	8.0	8.7	1.9	1.3	3.3	3.2	7.4	8.0	3.7
4215	Metals	7.5	10.3	7.1	10.3	1.6	0.6	3.0	2.2	6.9	5.6	3.7
4216	Electrical	3.5	4.8	3.4	4.8	1.2	0.5	1.6	1.4	3.6	3.6	2.1
4217	Hardware	8.0	10.5	8.0	10.5	1.2	0.6	1.8	1.5	7.9	8.0	1.0
4218	Machinery	3.9	3.3	3.9	3.3	1.8	0.5	2.0	1.1	3.5	3.2	1.9
4219	Misc. Durable	4.0	7.7	4.3	7.6	1.8	0.8	2.6	2.4	3.7	4.2	2.2
422	Nondurable	1.9	2.4	1.9	2.4	0.5	0.4	1.0	1.9	1.6	1.8	0.9
4221	Paper	4.6	3.7	4.6	3.7	1.0	0.6	1.3	1.4	4.8	4.2	1.0
4222	Drugs	5.8	5.5	5.8	5.5	1.1	0.5	1.5	1.8	5.5	5.8	1.0
4223	Apparel	5.1	5.0	5.2	4.9	2.0	0.9	2.5	1.9	4.8	4.3	2.0
4224	Groceries	3.8	8.2	3.8	8.2	0.9	0.7	1.5	2.2	3.5	3.7	0.8
4225	Farm products	7.5	8.4	7.6	8.3	2.2	2.1	2.6	3.7	7.5	7.2	2.2
4226	Chemicals	4.8	7.0	4.8	7.0	1.0	0.7	1.8	2.1	4.7	4.5	1.4
4227	Petroleum	7.1	8.8	7.0	8.7	0.8	1.5	1.9	2.2	7.2	6.9	1.8
4228	Alcohol	3.9	5.2	3.9	5.1	0.9	0.7	1.1	1.1	4.1	3.9	0.7
4229	Misc. Nondur.	8.0	8.7	8.0	8.6	2.0	0.8	4.2	4.7	8.6	8.2	4.4

Note: Estimated measures of sampling variability are based on estimates unadjusted for seasonal variation or trading-day differences. Medians are computed using final monthly estimates for the latest 12 months. Additional information on confidentiality protection, sampling error, nonsampling error, sample design, and definitions may be found at <a href="https://www.census.gov/svsd/www/mwtsreliability.html">www.census.gov/svsd/www/mwtsreliability.html</a>.

## Reliability of Estimates

There are two types of errors possible in an estimate based on a sample survey: sampling and nonsampling.

Sampling errors occur because observations are made on a sample, not on the entire population, and different samples could have led to different estimates. Standard errors and coefficients of variation, as calculated for this report, are measures of sampling variation. The margin of sampling error, as used on page 1, gives a range about the estimate which is a 90% confidence interval. If, for example, the percent change estimate is up 1.2% and the standard error is 0.9%, then the margin of sampling error is  $\pm 1.65 \times 0.9\%$  or  $\pm 1.5\%$ , and the 90% confidence interval is  $\pm 0.3\%$  to  $\pm 0.3\%$  to  $\pm 0.3\%$  to interval contains zero, then we do not have sufficient evidence to conclude the estimated change was statistically different from zero. For monthly totals, the coefficient of variation (CV) is given. The resulting confidence interval is the estimated value  $\pm 1.65 \times CV \times (the estimated value)$ .

Nonsampling errors can occur because of nonresponse, insufficient coverage of the universe of wholesale businesses, mistakes in the recording and coding of data, and response errors. Imputed data accounts for approximately 28% of the sales estimates and 31% of the inventories estimates. Additionally, estimates of sales and inventories prior to March 2001 have been restated from SIC-based estimates. The restatement methodology may have introduced additional nonsampling error. The calculated median standard errors of year-to-year change estimates may also be influenced by the methodology used to impute historical data for units in the NAICS sample. The effect of this historic imputation methodology on published estimates will decrease as more data from the NAICS sample is accumulated. Precautionary steps are taken to minimize nonsampling errors, but their magnitude is not directly measured.

Further information regarding the reliability of estimates can be found on the Internet on our web page at <a href="http://www.census.gov/svsd/www/mwtsreliability.html">http://www.census.gov/svsd/www/mwtsreliability.html</a>.

Table 3. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers

[Seasonal adjustment factors are computed using the Census Bureau's X-12 ARIMA program and are based on data from the Monthly Wholesale Trade Survey, Annual Wholesale Trade Survey, and administrative records.]

NAICS	Kind of	Sales							Inventories					
code	Business	2004				2003	2003	2004			2003	2003		
		Apr.	Mar.r	Feb.r	Jan.	Dec.	Mar.r	Apr.	Mar.r	Feb.r	Jan.	Dec.	Mar.r	
42	U.S. Total <sup>1</sup>	1.014	1.077	0.928	0.941	1.022	1.016	1.003	1.008	1.007	1.012	1.008	1.007	
421	Durable	1.012	1.090	0.920	0.910	1.008	1.026	1.015	1.006	1.003	0.995	0.985	1.004	
4211	Automotive	1.044	1.110	0.921	0.892	1.044	1.043	1.026	1.029	1.034	1.009	0.997	1.027	
4212	Furniture	1.011	1.066	0.910	0.910	0.971	1.009	0.982	0.979	0.984	0.983	0.977	0.977	
4213	Lumber	1.055	1.080	0.867	0.874	0.847	0.996	1.044	1.043	1.012	0.995	0.958	1.040	
4214	Prof. equip.	0.961	1.105	0.901	0.914	1.093	1.041	1.007	0.984	0.998	0.998	0.987	0.982	
42143	Comp. equip.	0.934	1.111	0.888	0.918	1.132	1.049	1.026	0.978	0.978	0.990	0.984	0.973	
4215	Metals	1.040	1.090	0.963	0.960	0.900	1.011	1.018	1.009	0.999	0.999	1.013	1.005	
4216	Electrical	0.996	1.093	0.924	0.924	0.987	1.030	0.998	0.981	0.989	0.993	0.987	0.981	
4217	Hardware	1.046	1.076	0.902	0.925	0.916	1.003	1.021	1.014	1.004	0.984	0.983	1.012	
4218	Machinery	1.058	1.109	0.895	0.901	1.042	1.028	1.024	1.018	1.001	0.977	0.972	1.016	
4219	Misc. Durable	0.983	1.103	0.927	0.918	1.002	1.045	1.001	0.984	1.000	1.008	0.980	0.983	
422	Nondurable	1.015	1.068	0.939	0.967	1.034	1.010	0.986	1.010	1.013	1.042	1.045	1.010	
4221	Paper	0.987	1.086	0.929	0.961	1.024	1.007	1.016	0.997	0.991	1.003	1.016	0.995	
4222	Drugs	1.006	1.088	0.927	0.991	1.085	1.000	1.001	1.014	0.985	1.042	1.046	1.013	
4223	Apparel	0.938	1.167	1.023	0.906	0.850	1.086	0.953	0.958	0.985	1.021	0.988	0.956	
4224	Groceries	1.001	1.054	0.912	0.947	1.020	1.019	0.984	0.999	0.986	1.006	1.021	0.997	
4225	Farm products	0.954	1.081	0.975	1.094	1.175	0.991	0.973	1.099	1.174	1.243	1.244	1.094	
4226	Chemicals	1.034	1.092	0.947	0.994	0.942	1.022	1.000	1.001	1.002	0.990	1.007	1.002	
4227	Petroleum	1.087	1.062	0.980	1.011	0.988	0.996	0.950	0.989	1.025	1.046	1.100	0.992	
4228	Alcohol	0.999	1.015	0.836	0.777	1.199	0.937	1.009	0.986	0.964	0.960	0.928	0.986	
4229	Misc. Nondur.	1.081	1.105	0.969	0.953	1.021	1.062	0.994	1.035	1.058	1.059	1.050	1.037	

## r Revised.

Note: The seasonal adjustment factors shown are estimates derived from a model that uses sample survey data as input. Therefore, these estimates may contain model error, sampling error, and nonsampling error. Additional information on the general form of the model and the X-12 ARIMA program may be found at <a href="http://www.census.gov/srd/www/x12a/">http://www.census.gov/srd/www/x12a/</a>.

<sup>&</sup>lt;sup>1</sup>Adjusted sales and inventory estimates for detailed kind-of-business levels in Table 1 are computed by dividing each unadjusted estimate by the seasonal adjustment factor for the corresponding kind of business and month. Adjusted estimates for broad kind-of-business levels are obtained by summing adjusted estimates at the appropriate detailed levels. Seasonal factors shown for broad kind-of-business levels may be used to approximate adjusted estimates at these levels, but the resulting estimates may differ slightly from the published estimates.